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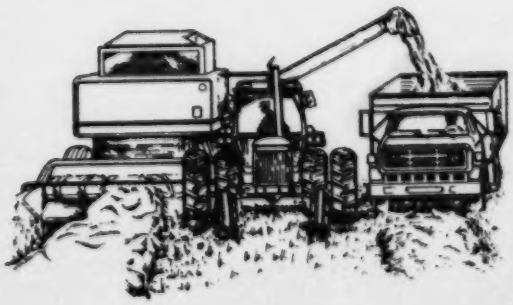

COST OF PRODUCING GRAIN CROPS IN SASKATCHEWAN 1988

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Foreword

A manager of a business must keep in mind the fact that we live in a changing world. To successfully manage a business, a manager must be able to recognize and plan for changing conditions. A thorough knowledge of both production and financial requirements for each product produced in a farm business is needed to successfully deal with the changes that have and will continue to take place in the agricultural industry.

The Top Management program uses a computer forward planning model that generates a cost of production report as well as projected financial statements for the next five years. This computer model allows a farm manager to enter information on his farm business, develop different scenarios for the future and test the strength of the farm business.

This bulletin provides an outline of the Top Management program and a summary of the information gathered as well as a general overview of the market outlook for each crop. Average estimates of the cost to produce and return received per acre are provided on a crop and soil zone basis. With his information a farm manager will be able to assess the performance of this farm business as it relates to other farm businesses producing the same crops. This information will also be of use to individuals who are considering producing a crop for the first time as it will provide a guide to the cost and return associated with each crop.

This publication was prepared by the Farm Management Section of the Economics Branch, Saskatchewan Agriculture. The contribution of individuals who assisted in compiling and reviewing this publication is gratefully acknowledged. A special thank you is extended to Saskatchewan farmers who participated in the Top Management program, to Dr. Schoney of the University of Saskatchewan, and to Tom Thorson and his staff for their work with the Top Management program.

Farm Management Section
Economics Branch
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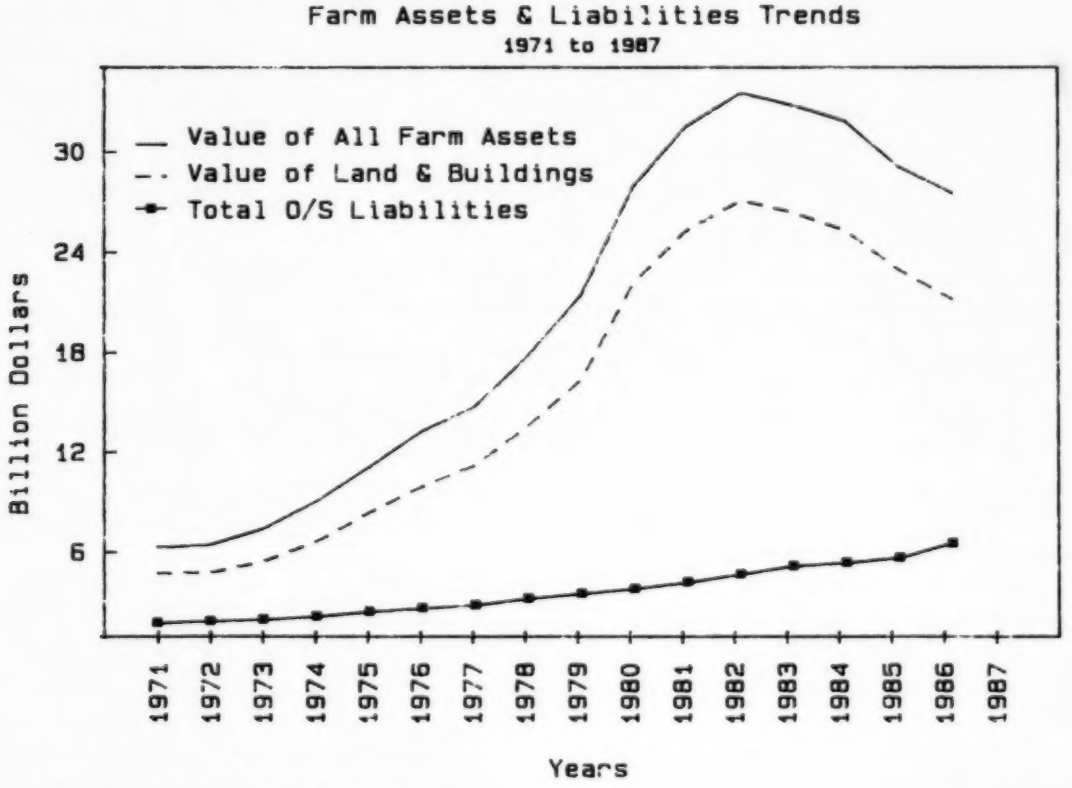
Introduction

This publication deals with the cost of producing a crop and the expected income for 1988. The information was obtained from an analysis of the data provided by 130 farmers who participated in the Top Management Program. The farms were categorized by soil zone. Estimates of the average cost to produce each specific crop in 1988 as well as an estimate for income was calculated.

Care must be exercised in interpreting the cost of production statement in this publication. While the statements are based on actual farm data for 1988 it must be recognizd that the sample size is quite small and is not statistically drawn. Thus, the results should not be interpreted as provincial averages but should be used as a guide to the cost and returns associated with each specific crop.



Source : Statistics Canada

Real Estate Values

Saskatchewan farm real estate values have declined each year since 1982. The decline in value is approximately 23% to the end of 1987 from the peak of almost $27 billion in 1982.

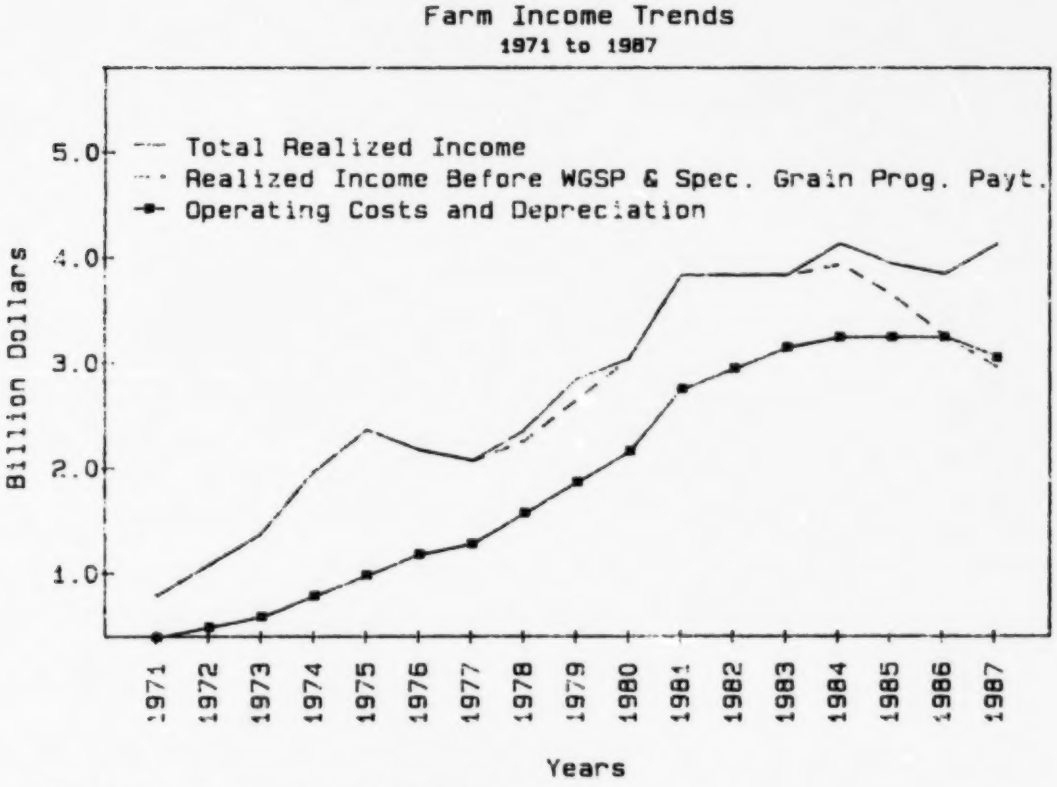
Recent declines in land prices are in contrast to the steady and rapid increases during the 1970s when grain prices were increasing and interest rates were favourable.

Farm Income Trends

Saskatchevan net realized farm income fluctuates greatly from year to year. After reaching a low in 1984 of $326 million, net realized farm income increased to $1.4 billion in 1986, then declined in 1987 to $960 million.

Government transfer payments have become increasingly important during the 1980s. These payments are made up of Western Grain Stabilization payments, and the Canadian Special Grains Program. In 1987, government transfer payments were approximately $1.3 billion. Net realized farm income of $960 million in 1987, would have been negative without government transfer payments.

It is expected that payments under the Special Grains program will likely be near the same for next year while payments from the Western Grain Stabilization program may be substantially lower.



Source : Statistics Canada

Methodology

The Top Management computer model allows farm managers to enter their cropping plans for the next five years. The computer model calculates detailed cost and returns for each crop for 1988 and a summary of income and expenses for the following four years. The cost and returns shown in this publication are an average of the detailed estimates calculated for

each farmer for 1988. Figures were not calculated for a crop if less than seven farmers planned to produce the crop or if less than 500 acres were sown to the crop in 1988.

The average cost per acre for each crop is calculated as a weighted average. Using this approach to calculating averages will result in the figures being closer to the cost estimates provided by the larger farmers. In addition, the participants in the Top Management program have farm operations somewhat larger than the average farm size for the province.

With a larger number of participants, average per acre figures could be calculated for specific farm sizes. In the past, however, farm size has had very little effect on the per acre costs and income of operating a farm.

Miscellaneous income shown in these cost of production statements represents the amount income expected as payments in 1988 from the Special Grains Program. Payments from the Western Grain Stabilization Program are not included in these statements.

Labour costs and property taxes in these statements are calculated as an average for each soil zone. Depreciation for buildings and equipment in these statements is equal to one-half of the amount calculated by the Top Management program for capital recovery (the Top Management program includes depreciation and interest on investment in the figure for capital recovery). All other figures for costs and income are calculated as a weighted average from the Top Management data.

Net Farm Cash Income is the difference between the total income and total cash expenses. This amount represents the actual dollars that a farmer has from each crop to cover his living costs, loan payments, and to accumulate savings.

Net Farm Income is the difference between the total income for each crop and the total cash expenses plus depreciation. This amount represents the return to the farmer's labour, management and investment.

Comparison to Table 12 of the Top Management Reports

A number of the figures in these statements can be compared to the figures in Table 12 of the Top Management reports.

i. Total crop inputs would be the same figure as "Materials" in Table 12 (Section II 1-a).

ii. Equipment expenses -- fuel, oil and lubricants is similar to "Power" in Table 12. Repairs and maintenance is similar to "Repairs" in Table 12. Miscellaneous is similar to the "Machinery Lease".

Indirect equipment expenses is similar to "Power and Repairs" (Section III b - 3) in Table 12.

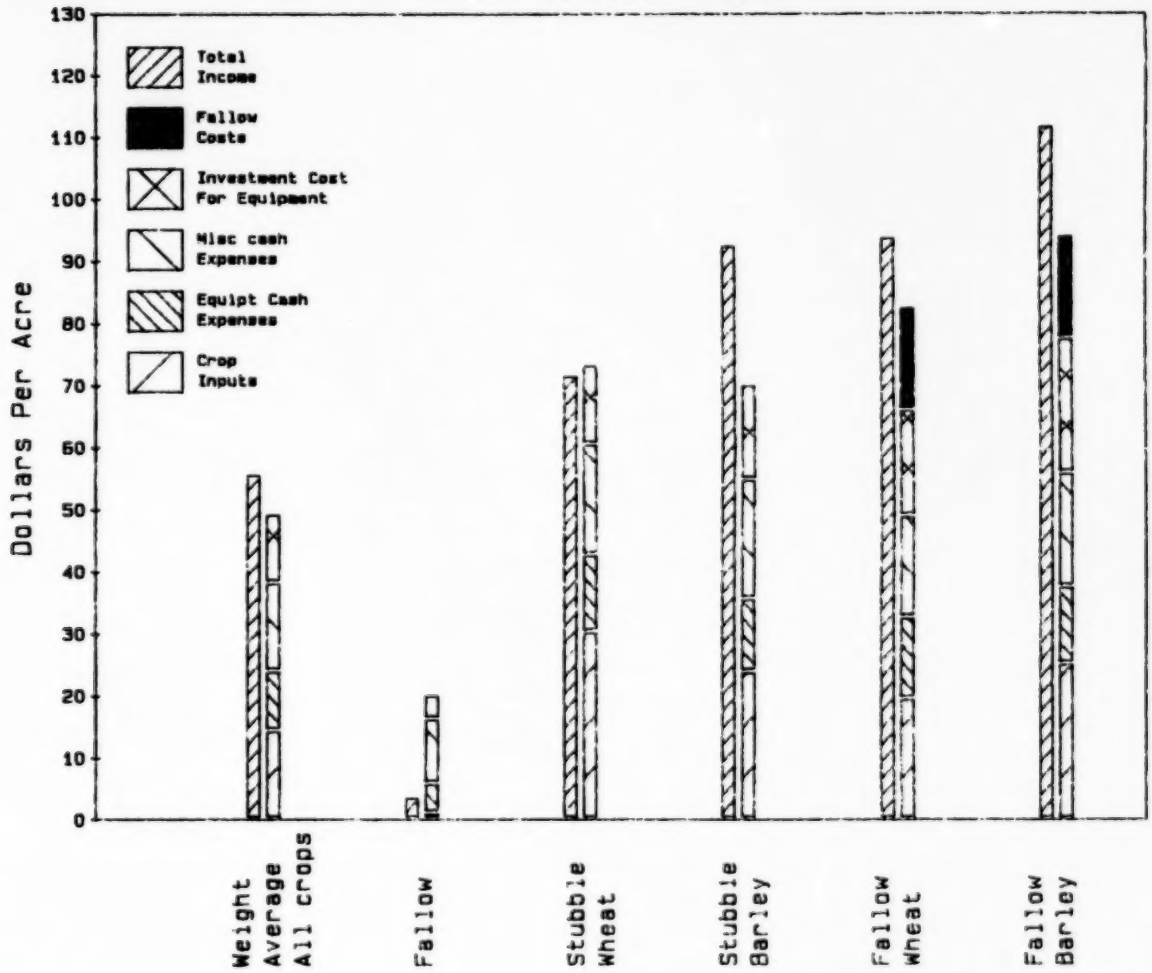
iii. Price per bushel is similar to the "Price" (Section I d) in Table 12.

iv. Yield per acre is the same as "Average Total Combined" (Section I c) in Table 12.

Table 1 Cost Of Production Averages

	All Farms	Brown Soilzone	Dark Brown Soilzone	Black Soilzone
Number in this group	130	28	53	49
Average farm size	1712	1902	1792	1540
Percent cropped	72%	60%	67%	86%
Investment in Equip't	$ 88	$ 69	$ 84	$107
Investment in Bldgs	$ 8	$ 7	$ 6	$ 10
Market value of farm land	$348	$332	$320	$392
Projected Income		**Dollars Per Acre**		
Grain income	65.32	47.77	57.63	87.85
Deficiency Payments	8.29	7.79	7.70	9.44
Total Income	**73.61**	**55.56**	**65.33**	**97.29**
Projected Expenses				
Crop inputs				
Seed	3.59	2.73	3.20	4.72
Fertilizer				
Nitrogen	3.68	1.10	2.03	7.68
Phosphorus	3.13	2.09	2.55	4.63
Other fertilizer	.90	.46	1.04	1.02
Chemical				
Herbicide	7.14	5.25	5.83	10.22
Insecticide	.18	.15	.13	.26
Crop insurance	1.82	1.73	1.53	2.27
Hail insurance	.56	.51	.50	.68
Miscellaneous crop inputs	.43	.19	.34	.71
Total Crop Inputs	21.43	14.21	17.15	32.19
Equipment & Building Expenses				
Fuel, oil and lubricants	4.28	3.29	4.03	5.30
Repairs and maintenance	4.26	3.53	3.66	5.58
Miscellaneous	2.76	2.57	2.08	3.52
Indirect equipment expenses	.62	.20	.53	1.02
Total Equipment Expenses	11.83	9.59	10.30	15.42
Other Expenses				
Labour	5.20	6.55	5.12	4.13
Property taxes	2.69	2.59	2.64	2.83
Miscellaneous	3.75	3.82	3.72	3.76
Operating interest	1.82	1.28	1.51	2.60
Total Other Costs	13.38	14.24	12.99	13.32
Total Cash Costs	**46.64**	**38.04**	**40.44**	**60.93**
Depreciation bldgs & equipt	13.66	11.09	13.10	16.22
Total cash & depreciation cost	**60.30**	**49.13**	**53.54**	**77.15**
Net Farm Cash Income	**26.77**	**17.52**	**24.89**	**36.36**
Net Farm Income	**13.31**	**6.43**	**11.79**	**20.14**
Living costs	**9.76**	**7.28**	**10.15**	**10.98**
Number of gallons fuel per acre	**2.9**	**2.1**	**2.6**	**3.6**

Brown Soil Zone
Average Returns and Costs
For Specific Crops



Weighted Average For All Crops - $ Per Cultivated Acre

Total Income	$55.56
Crop Inputs	$14.21
Bldgs. & Equipt. Cash Expenses	$ 9.59
Miscellaneous Cash Expenses	$14.24
Depreciation - Bldgs. & Equipt.	$11.09
Depreciation And Cash Expenses	$49.13

Table 2.1: Brown Soil Zone

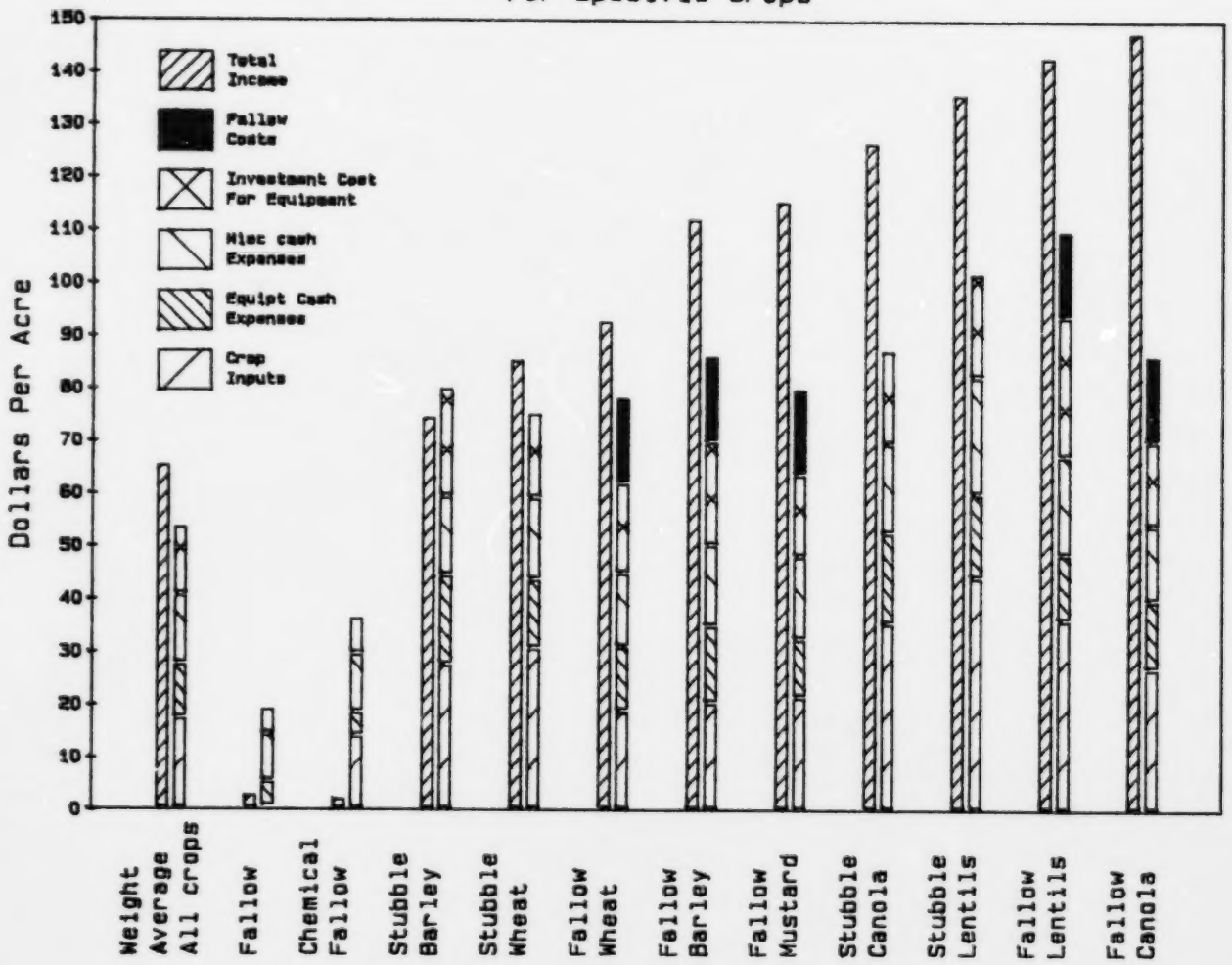
	Summerfallow	Summerfallow Wheat	Summerfallow Barley
Number in this group	27	42	8
Total acres in this crop	15977	12999	1612
Projected Income		**Dollars Per Acre**	
Miscellaneous income	3.48	11.10	12.74
Price per bushel		2.85	1.94
Yield per acre		29.00	51.00
Total income	**3.48**	**93.75**	**111.68**
Projected Expenses			
Crop inputs			
Seed		4.21	4.00
Fertilizer			
Nitrogen		0.41	0.00
Phosphorus		3.12	4.43
Other fertilizer		0.72	0.71
Chemical			
Herbicide	0.95	6.88	11.18
Insecticide		0.15	0.23
Crop insurance		2.78	3.10
Hail insurance		0.99	1.36
Miscellaneous crop inputs	0.05	0.12	0.00
Total crop inputs	1.00	19.38	25.01
Equipment and Building Expenses			
Fuel, oil and lubricants	2.22	4.41	4.85
Repairs and maintenance	1.80	4.76	4.49
Miscellaneous	0.05	0.12	0.04
Indirect equipment expenses	0.69	3.82	2.98
Total equipment expenses	4.76	13.11	12.36
Other Expenses			
Labour	6.55	6.55	6.55
Property taxes	2.59	2.59	2.59
Miscellaneous	0.96	5.46	7.15
Operating interest	0.30	1.72	2.09
Total other costs	10.40	16.32	18.38
Total cash costs	**16.16**	**48.81**	**55.75**
Depreciation buildings and equipment	3.82	17.15	21.76
Total cash and depreciation cost	**19.98**	**65.96**	**77.51**
Net farm cash income	**-12.68**	**44.94**	**55.93**
Net farm income	**-16.50**	**27.79**	**34.17**
Direct time per acre (hours)	0.22	0.58	0.83
Number of gallons fuel per acre	1.45	2.77	3.43
Investment in equipment per acre	29.21	104.59	136.08

Table 2.2: Brown Soil Zone

	Stubble Wheat	Stubble Barley
Number in this group	22	10
Total acres in this crop	4253	1035
Projected Income	**Dollars Per Acre**	
Miscellaneous income	11.80	13.72
Price per bushel	2.71	1.97
Yield per acre	22.00	40.00
Total income	**71.42**	**92.52**
Projected Expenses		
Crop inputs		
Seed	4.11	3.75
Fertilizer		
Nitrogen	6.54	5.57
Phosphorus	4.31	5.01
Other fertilizer	1.67	0.37
Chemical		
Herbicide	8.83	6.94
Insecticide	0.33	0.35
Crop insurance	3.28	1.41
Hail insurance	0.47	0.30
Miscellaneous crop inputs	0.60	0.05
Total crop inputs	30.14	23.75
Equipment and Building Expenses		
Fuel, oil and lubricants	3.62	2.75
Repairs and maintenance	4.28	5.12
Miscellaneous	0.62	0.08
Indirect equipment expenses	3.87	3.81
Total equipment expenses	12.39	11.76
Other Expenses		
Labour	6.55	6.55
Property taxes	2.59	2.59
Miscellaneous	6.39	8.05
Operating interest	2.36	1.97
Total other costs	17.89	19.16
Total cash costs	**60.42**	**54.67**
Depreciation buildings and equipment	12.72	15.30
Total cash and depreciation cost	**73.14**	**69.97**
Net farm cash income	**11.00**	**37.85**
Net farm income	**-1.72**	**22.55**
Direct time per acre (hours)	0.57	0.68
Number of gallons fuel per acre	2.14	1.88
Investment in equipment per acre	73.16	98.62

Dark Brown Soil Zone

Average Returns and Costs For Specific Crops



Weighted Average For All Crops - $ Per Cultivated Acre

Total Income	$65.33
Crop Inputs	$17.15
Bldgs. & Equipt. Cash Expenses	$10.30
Miscellaneous Cash Expenses	$12.99
Depreciation - Bldgs. & Equipt.	$13.10
Total Fixed And Cash Expenses	$53.54

Table 3.1: Dark Brown Soil Zone

	Summerfallow	Summerfallow	Summerfallow Wheat
Number in this group	53	8	71
Total acres in this crop	25214	1014	18438
Projected Income		**Dollars Per Acre**	
Miscellaneous income	2.79	2.13	10.50
Price per bushel			2.74
Yield per acre			30.00
Total income	**2.80**	**2.13**	**92.70**
Projected Expenses			
Crop inputs			
Seed			4.79
Fertilizer			
Nitrogen			0.41
Phosphorus			3.22
Other fertilizer			0.31
Chemical			
Herbicide	0.48	13.91	7.11
Insecticide			0.06
Crop insurance			1.98
Hail insurance			0.76
Miscellaneous crop inputs			0.09
Total Crop Inputs	0.48	13.91	18.73
Equipment and Building Expenses			
Fuel, oil and lubricants	2.50	1.50	4.39
Repairs and maintenance	1.76	1.88	4.40
Miscellaneous	0.05	0.00	0.79
Indirect equipment expenses	0.44	1.09	2.52
Total equipment expenses	4.75	4.47	12.10
Other Expenses			
Labour	5.12	5.12	5.12
Property taxes	2.64	2.64	2.64
Miscellaneous	0.86	2.26	4.64
Operating interest	0.28	1.04	1.64
Total other costs	8.90	11.06	14.04
Total cash costs	**14.13**	**29.44**	**44.87**
Depreciation buildings and equipment	4.90	6.84	17.01
Total cash and depreciation cost	**19.03**	**36.28**	**61.88**
Net farm cash income	**-11.33**	**-27.31**	**47.83**
Net farm income	**-16.23**	**-34.15**	**30.82**
Direct time per acre (hours)	0.28	0.18	0.83
Number of gallons fuel per acre	1.71	0.96	2.81
Investment in equipment per acre	40.57	48.03	104.34

Table 3.2: Dark Brown Soil Zone

	Summerfallow Barley	Summerfallow Canola	Summerfallow Lentils
Number in this group	14	19	9
Total acres in this crop	2401	3154	717
Projected Income		**Dollars Per Acre**	
Miscellaneous income	10.32	8.85	5.90
Price per bushel	1.85	5.78	8.06
Yield per acre	55.00	24.00	17.00
Total income	**112.07**	**147.57**	**142.92**
Projected Expenses			
Crop inputs			
Seed	3.99	4.58	15.71
Fertilizer			
Nitrogen	1.24	0.62	0.00
Phosphorus	5.16	4.22	2.88
Other fertilizer	0.00	1.98	0.00
Chemical			
Herbicide	7.32	8.96	11.09
Insecticide	0.11	0.51	0.40
Crop insurance	1.69	3.34	2.82
Hail insurance	0.44	1.30	0.87
Miscellaneous crop inputs	0.37	1.38	2.23
Total crop inputs	20.32	26.89	36.00
Equipment and Building Expenses			
Fuel, oil and lubricants	6.24	4.21	3.21
Repairs and maintenance	5.18	4.15	2.88
Miscellaneous	0.58	1.59	0.02
Indirect equipment expenses	2.50	2.98	6.40
Total equipment expenses	14.50	12.93	12.51
Other Expenses			
Labour	5.12	5.12	5.12
Property taxes	2.64	2.64	2.64
Miscellaneous	5.76	4.34	7.99
Operating interest	1.86	2.12	2.94
Total other costs	15.38	14.22	18.69
Total cash costs	**50.20**	**54.04**	**67.20**
Depreciation buildings and equipment	19.65	15.92	26.50
Total cash and depreciation cost	**69.85**	**69.96**	**93.70**
Net farm cash income	**61.87**	**93.53**	**75.72**
Net farm income	**42.22**	**77.61**	**49.22**
Direct time per acre (hours)	1.29	0.71	0.92
Number of gallons fuel per acre	3.79	3.04	1.96
Investment in equipment per acre	132.40	100.68	117.00

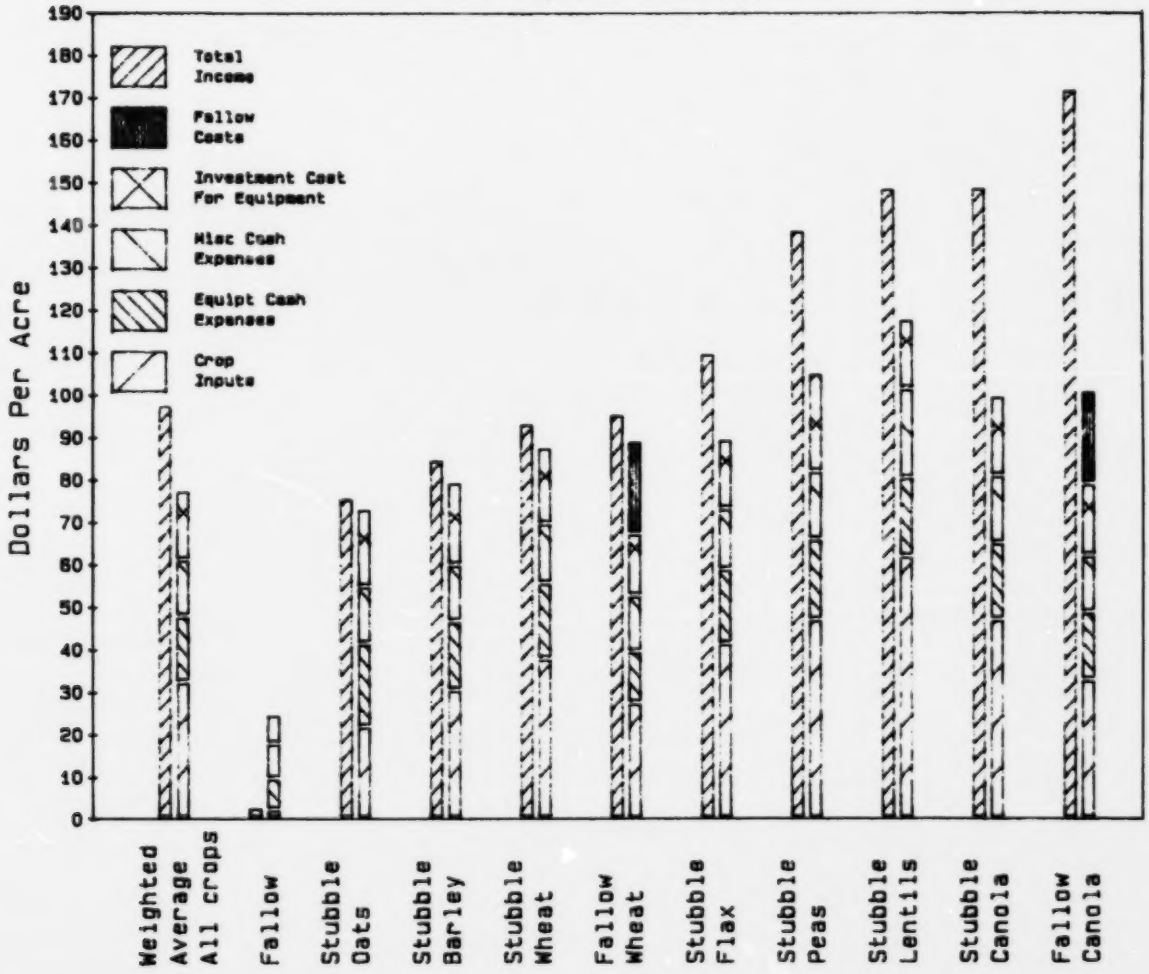
Table 3.3: Dark Brown Soil Zone

	Summerfallow Mustard	Stubble Wheat	Stubble Barley
Number in this group	8	68	25
Total acres in this crop	923	14404	3308
		Dollars Per Acre	
Projected Income			
Miscellaneous income	4.98	11.80	13.75
Price per bushel	5.02	2.72	1.48
Yield per acre	22.00	27.00	41.00
Total income	115.42	85.24	74.43
Projected Expenses			
Crop inputs			
Seed	2.53	4.37	3.61
Fertilizer			
Nitrogen	0.00	6.25	7.62
Phosphorus	2.48	4.46	4.82
Other fertilizer	4.06	2.76	0.99
Chemical			
Herbicide	5.12	9.11	5.97
Insecticide	1.97	0.14	0.02
Crop insurance	4.33	2.16	2.15
Hail insurance	0.96	0.66	0.94
Miscellaneous crop inputs	0.00	0.62	1.28
Total crop inputs	21.45	30.53	27.40
Equipment and Building Expenses			
Fuel, oil and lubricants	3.52	5.16	6.40
Repairs and maintenance	2.76	4.61	5.59
Miscellaneous	0.17	0.64	1.36
Indirect equipment expenses	4.40	2.64	3.63
Total equipment expenses	10.85	13.05	16.98
Other Expenses			
Labour	5.12	5.12	5.12
Property taxes	2.64	2.64	2.64
Miscellaneous	6.35	5.24	4.74
Operating interest	1.68	2.48	2.43
Total other costs	15.79	15.48	14.93
Total cash costs	48.09	59.06	59.31
Depreciation buildings and equipment	15.52	16.04	20.64
Total cash and depreciation cost	63.61	75.10	79.95
Net Farm Cash Income	67.33	26.18	15.12
Net Farm Income	51.81	10.14	-5.52
Direct time per acre (hours)	0.42	0.86	0.80
Number of gallons fuel per acre	2.40	3.20	3.69
Investment in equipment per acre	84.50	98.15	122.12

Table 3.4: Dark Brown Soil Zone

	Stubble Canola	Stubble Lentils
Number in this group	11	8
Total acres in this crop	1586	1199
Projected Income	Dollars Per Acre	
Miscellaneous income	8.22	5.03
Price per bushel	5.64	6.54
Yield per acre	21.00	20.00
Total income	**126.66**	**135.83**
Projected Expenses		
Crop inputs		
Seed	4.16	9.37
Fertilizer		
Nitrogen	8.33	1.00
Phosphorus	3.52	3.33
Other fertilizer	1.59	1.46
Chemical		
Herbicide	9.58	21.33
Insecticide	1.31	0.16
Crop insurance	4.33	5.79
Hail insurance	1.10	1.42
Miscellaneous crop inputs	1.49	0.20
Total crop inputs	35.41	44.06
Equipment and Building Expenses		
Fuel, oil and lubricants	5.08	4.02
Repairs and maintenance	6.39	7.22
Miscellaneous	1.16	0.00
Indirect equipment expenses	4.51	4.68
Total equipment expenses	**17.14**	**15.92**
Other expenses		
Labour	5.12	5.12
Property taxes	2.64	2.64
Miscellaneous	6.28	10.98
Operating interest	2.94	3.51
Total other costs	16.98	22.25
Total cash costs	**69.53**	**82.23**
Depreciation buildings and equipment	17.59	19.58
Total cash and depreciation cost	**87.12**	**101.81**
Net farm cash income	**57.13**	**53.60**
Net farm income	**39.54**	**34.02**
Direct time per acre (hours)	0.74	0.58
Number of gallons fuel per acre	3.33	2.75
Investment in equipment per acre	110.84	123.21

Black Soil Zone
Average Returns and Costs For Specific Crops



Weighted Average For All Crops - $ Per Cultivated Acre

Total Income	$97.29
Crop Inputs	$32.19
Bldgs. & Equipt. Cash Expenses	$15.42
Miscellaneous Cash Expenses	$13.32
Depreciation - Eqpt. & Bldgs.	$16.22
Total Fixed And Cash Expenses	$77.15

Table 4.1: Black Soil Zone

	Summerfallow	Summerfallow Wheat	Summerfallow Canola
Number in this group	32	17	30
Total acres in this crop	8272	3403	4706
Projected Income		**Dollars Per Acre**	
Miscellaneous income	2.50	10.34	9.03
Price per bushel		2.57	5.61
Yield per acre		33.00	29.00
Total income	**2.50**	**95.15**	**171.72**
Projected Expenses			
Crop inputs			
Seed		4.88	3.95
Fertilizer			
Nitrogen		6.78	2.70
Phosphorus		4.19	5.12
Other fertilizer		0.25	1.87
Chemical			
Herbicide	2.04	6.96	12.69
Insecticide		0.52	0.94
Crop insurance		3.15	3.66
Hail insurance		0.48	1.02
Miscellaneous crop inputs		0.04	0.74
Total crop inputs	2.04	27.25	32.69
Equipment & Building Expenses			
Fuel, oil and lubricants	3.52	4.86	5.26
Repairs and maintenance	3.01	4.76	5.67
Miscellaneous	0.12	0.05	1.07
Indirect equipment expenses	0.67	2.36	3.91
Total equipment expenses	7.32	12.03	15.91
Other Expenses			
Labour	4.13	4.13	4.13
Property taxes	2.83	2.83	2.83
Miscellaneous	0.75	4.04	3.80
Operating interest	0.51	2.24	2.63
Total other costs	**8.22**	**13.24**	**13.39**
Total cash costs	17.58	52.52	61.99
Depreciation buildings & equipment	6.76	14.52	16.84
Total cash & depreciation cost	**24.34**	**67.04**	**78.83**
Net farm cash income	**-15.08**	**42.63**	**109.73**
Net farm income	**-21.84**	**28.11**	**92.89**
Direct time per acre (hours)	0.36	0.72	6.47
Number of gallons fuel per acre	2.42	3.26	3.43
Investment in equipment per acre	58.65	90.88	110.27

Table 4.2: Black Soil Zone

	Stubble Wheat	Stubble Barley	Stubble Canola
Number in this group	58	36	36
Total acres in this crop	15238	5682	6718
Projected Income		**Dollars Per Acre**	
Miscellaneous income	12.28	12.33	9.84
Price per bushel	2.52	1.31	5.55
Yield per acre	32.00	55.00	25.00
Total income	**92.92**	**84.38**	**148.59**
Projected Expenses			
Crop inputs			
Seed	5.23	3.64	4.32
Fertilizer			
Nitrogen	11.26	9.41	12.87
Phosphorus	6.31	4.98	5.30
Other fertilizer	0.47	0.81	3.49
Chemical			
Herbicide	10.81	8.30	14.51
Insecticide	0.07	0.22	0.82
Crop insurance	2.08	1.88	3.36
Hail insurance	0.74	0.66	1.03
Miscellaneous crop inputs	0.63	0.40	1.20
Total crop inputs	37.60	30.30	46.90
Equipment & Building Expenses			
Fuel, oil and lubricants	5.66	6.46	5.67
Repairs and maintenance	6.34	6.31	6.33
Miscellaneous	1.38	0.50	1.61
Indirect equipment expenses	4.39	2.88	4.40
Total equipment expenses	17.77	16.15	18.01
Other Expenses			
Labour	4.13	4.13	4.13
Property taxes	2.83	2.83	2.83
Miscellaneous	4.09	3.70	5.24
Operating interest	2.99	2.59	3.62
Total other costs	14.04	13.25	15.82
Total cash costs	**69.41**	**59.70**	**80.73**
Depreciation buildings & equipment	17.84	19.38	18.63
Total cash & depreciation cost	**87.25**	**79.08**	**99.36**
Net farm cash income	**23.51**	**24.68**	**67.86**
Net farm income	**5.67**	**5.30**	**49.23**
Direct time per acre (hours)	2.90	19.96	0.76
Number of gallons fuel per acre	3.89	4.31	3.94
Investment in equipment per acre	115.18	125.25	115.14

Table 4.3: Black Soil Zone

	Stubble Flax	Stubble Oats	Stubble Lentils
Number in this group	26	16	7
Total acres in this crop	5497	1442	508
Projected Income		**Dollars Per Acre**	
Miscellaneous income	10.85	6.53	4.11
Price per bushel	4.70	1.11	7.60
Yield per acre	21.00	62.00	19.00
Total income	**109.55**	**75.35**	**148.51**
Projected Expenses			
Crop inputs			
Seed	3.92	3.45	18.91
Fertilizer			
Nitrogen	10.76	8.85	3.63
Phosphorus	5.78	4.68	7.30
Other fertilizer	0.27	0.84	0.33
Chemical			
Herbicide	16.12	2.08	21.78
Insecticide	0.07	0.00	0.22
Crop insurance	3.30	0.96	3.95
Hail insurance	0.51	0.50	2.40
Miscellaneous crop inputs	0.51	0.23	3.19
Total crop inputs	41.24	21.59	61.71
Equipment & Building Expenses			
Fuel, oil and lubricants	4.95	7.00	6.07
Repairs and maintenance	5.86	7.63	8.43
Miscellaneous	0.59	1.26	0.90
Indirect equipment expenses	6.05	3.77	3.11
Total equipment expenses	17.45	19.66	18.51
Other Expenses			
Labour	4.13	4.13	4.13
Property taxes	2.83	2.83	2.83
Miscellaneous	4.23	3.91	9.37
Operating interest	3.13	2.48	4.74
Total other costs	14.32	13.35	21.07
Total cash costs	**73.01**	**54.60**	**101.29**
Depreciation buildings & equipment	16.25	18.16	16.29
Total cash & depreciation cost	**89.26**	**72.76**	**117.58**
Net farm cash income	**36.54**	**20.75**	**47.22**
Net farm income	**20.29**	**2.59**	**30.93**
Direct time per acre (hours)	0.66	1.25	0.82
Number of gallons fuel per acre	3.40	4.49	3.98
Investment in equipment per acre	113.05	102.97	93.23

Table 4.4: Black Soil Zone

	Stubble Peas
Number in this group	29
Total acres in this crop	2984
Projected Income	**Dollars Per Acre**
Miscellaneous income	6.28
Price per bushel	4.41
Yield per acre	30.00
Total income	**138.58**
Projected Expenses	
Crop inputs	
Seed	17.88
Fertilizer	
Nitrogen	3.51
Phosphorus	4.77
Other fertilizer	2.00
Chemical	
Herbicide	11.24
Insecticide	0.14
Crop insurance	3.03
Hail insurance	1.04
Miscellaneous crop inputs	3.25
Total crop inputs	46.86
Equipment & Building Expenses	
Fuel, oil and lubricants	6.29
Repairs and maintenance	5.77
Miscellaneous	2.83
Indirect equipment expenses	3.98
Total equipment expenses	18.87
Other Expenses	
Labour	4.13
Property taxes	2.83
Miscellaneous	5.52
Operating interest	3.55
Total other costs	16.03
Total cash costs	**81.76**
Depreciation buildings & equipment	23.15
Total cash & depreciation cost	**104.91**
Net farm cash income	**56.82**
Net farm income	**33.67**
Direct time per acre (hours)	5.64
Number of gallons fuel per acre	4.58
Investment in equipment per acre	146.31

Market Outlook

The following information was taken from Crop Market Prospects prepared by Saskatchewan Agriculture and the University of Saskatchewan. If you would like to have a complete copy of Crop Market Prospects 1988, please contact Dale Sigurdson, Economics Branch, Room 329 - Walter Scott Building, Regina S4S 0B1 (phone 787-7312).

Wheat Market Prospects

Forecast for 1988-89

Wheat stocks in 1987 declined by 18 million tonnes from 1986. A further decline of 10 million tonnes is expected in 1988-89. The United States loan rate (floor price) will be $2.17 per bushel for 1988 ($2.28/bu in 1987). However, this is unlikely to affect wheat prices since the market price is likely to trade above the floor price. The rising value of the Canadian dollar and the plan to discontinue the Canandian two-price wheat policy (worth 33 cents per bushel) will have a negative impact on wheat prices to Saskatchewan farmers.

1988 Wheat Forecast
#1 CWRS (Saskatoon)

Price $/bu	Probability
under $2.30	5%
2.30 - 2.70	15%
2.70 - 3.10	50%
3.10 - 3.60	20%
over 3.60	10%

Forecast $2.90/bushel
Top Management Participants Forecast $2.69/bushel

Durum Wheat Prospects

Forecast for 1988-89

World durum wheat production declined in 1987 as a result of lower production in Turkey and Morocco. A low quality durum crop in both Canada and the United States occurred. Durum prices strengthened during the 1987-88 year.

Canadian durum acreage in 1988 is expected to increase by 15% to 6.2 million acres because of the relatively better price of durum compared to spring wheat in 1987-88. United States production is likely to remain stable since their farm program will not encourage a shift from spring wheat to durum production.

The quality of the 1988 United States and Canadian durum crops will be a key factor affecting durum prices.

1988 Durum Forecast

#1 CWAD

Price $/bu	Probability
under - 2.90	5%
2.90 - 3.20	15%
3.20 - 3.60	50%
3.60 - 4.10	20%
over 4.10	10%

Forecast $3.40/bushel

Feed Grain Prospects

Forecast for 1988-89

World feed grain stocks increased sharply between 1984 and 1986. The United States Export Enhancement Program has drastically reduced barley prices.

During 1987-88 United States feed grain stocks declined by 15%. United States farmers currently have about 25 million acres of their feed grain base in "set-aside" or acreage diversion. Price prospects are almost entirely dependent on United States farm policy.

For 1988-89 a slight decline in world feed grain stocks is expected. United States farm policy is likely to remain the same. A modest increase in barley prices is expected.

Of feed oats deliveries to the Canadian Wheat Board, half was sold into the domestic market and half into export markets. In 1987-88 the United States accounted for 90% of Canadian Wheat Board oats exports. Oats prices have been relatively high in the United States.

The feed oats export market to the United States may continue to grow since the American farm program does not encourage oats production.

1987 Feed Grains Forecast

Price $/bu	Probability
#1 C.W. (Feed) Barley	
under - 1.10	10%
1.10 - 1.50	60%
1.50 - 2.40	20%
over - 2.40	10%

Forecast $1.30/bushel

#1 Feed Oats Forecast $0.90/bushel
Top Management Participants Forecast $1.24/bushel

Canola Prospects

Forecast for 1988/89

During 1987-88 world oilseed stocks declined slightly and prices increased. For 1988-89 canola prices are expected to average near the current market price.

Canola continues to become an increasingly important product in the world oilseed complex. It now ranks third in total world oilseed production.

The United States has extended its Export Enhancement Program to soy oil exports. This subsidy is expected to remain in force for 1988-89. Worldwide stocks of oilseeds are expected to decline for the second consecutive year.

1988 Canola Forecast
#1 Canada Canola (Saskatoon)

Price $/bu	Probability
less than 5.00	20%
5.00 - 6.60	60%
over 6.60	20%

Forecast $5.80/bushel
Top Management Participants Forecast $5.63/bushel

Flax Prospects

Forecast for 1988/89

World flaxseed production declined in 1987. Canada is the major world producer and seed exporter of flax. World linseed stocks are expected to decline slightly at the end of the 1987-88 crop year.

For 1988-89, seeded acreage of flax in Canada is expected to increase marginally. Prices have historically been volatile for flax due to the inelastic demand for oil.

1988 Flaxseed Forecast
#1 Canada Flaxseed (Saskatoon)

Price $/bu	Probability
less than 4.00	20%
4.00 - 5.60	60%
over 5.60	20%

Forecast $4.80/bushel
Top Management Participants Forecast $4.69/bushel

Specialty Crops Prospects

Saskatchevan special crops acres are expected to increase somewhat in 1988. Field pea acres are expected to double while lentil acreage will decline. Mustard acreage will increase slightly as will fababean and canaryseed acreage. Sunflower and corn acreage will remain constant. Factors influencing spring crop planting decisions include Canadian Wheat Board initial price announcements, proposed payments under the Special Canadian Grains program, spring moisture conditions and the outlook for canola prices.

Field Peas -- 1987 Western Canadian field pea production reached 454,000 tonnes, up from 238,000 tonnes in 1986. Saskatchevan acreage has doubled. Early indications of the 1988 market are that it will last providing Canadian peas are price-competitive with American soybean, Australian lupine and other meal crops such as rapeseed and sunflower meal. Prices will closely follow soymeal prices, and therefore if soy plantings go up 5% (3 million acres) then prices can be expected to decrease. Prices are also affected by the EEC pea and Australian pea and lupine production, both of which are expected to increase in 1988. Fluctuating exchange rates are also an important factor affecting the feed pea market, with the relationship between the English pound/Dutch gilder and Canadian dollar the most important.

Lentil -- The 1987 lentil acreage was nearly twice that of 1986. The total production was 312,000 tonnes, as compared to the 1986 production of 170,000 tonnes. Canada is facing the possibility of a significant lentil carryover for the first time in history. Canada's competitors in the lentil export markets, mainly Turkey and United States, will affect the 1988 market. Turkey is the world's largest lentil producer, producing twice as many lentil as Canada in 1987. However, Canada is the world's largest exporter of green lentils. However, Turkey's green lentil crop and programs impact Canada's situation directly. The United States is using the Target Export Assistance Program to promote their product overseas, resulting in lost sales for Canada, particularly to Spain. On the market side, the EEC will continue to be the largest buyer of Canadian peas and lentils. Lentil acreage in 1988 is expected to decrease in both Manitoba and Saskatchewan by 20 - 50%. Two other factors that will reduce Canadian lentil acreage for 1988 are unsold product at the farm level and the Reglone situation to be decided by Agriculture Canada.

Fababeans -- Saskatchevan fababean acreage reached a near record of 10,000 acres in 1987, with a good quality crop and above average yields harvested. However, fababean acreage remains low as compared to field pea and lentil production.

Dry Edible Beans -- Approximately 200 acres of dry edible beans were grown in Saskatchewan in 1987. The long frost-free season in 1987 added to the success of the production. One important factor to note for dry edible bean production is the agreement in principle to implement a stabilization program by Saskatchewan, Alberta, Ontario and Manitoba.

Mustard -- In 1987, Saskatchewan grew 210,000 acres of the total prairie mustard acreage of 275,000. The quality of the crop was generally good. Canada's major competitors in the export market are the U.K. and Hungary. All of these export countries compete for markets in United States, Europe, Japan and Canada. Mustard price is dictated in part by supply and in part by competitive commodities such as canola. The over production in 1986 led to a decrease in price. However, for the first time in recent history, oriental mustard prices exceeded yellow mustard prices. A large quantity of "open" yellow mustard remains unsold and is affecting prices.

Canaryseed -- Saskatchewan is the major world producer of canaryseed, and grows most of the 210,000 acres seeded in Western Canada. Canaryseed production suffered the most from the dry and hot weather conditions early in the 1987 growing season. Therefore, the low yields strengthened prices somewhat. Argentina, which is Canada's major competitor for canaryseed, also had production problems in 1987. Stocks are currently low, allowing for a possible price increase, if Canadian 1988 acreage does not exceed 250,000 acres.

Safflower -- Most of the 23,000 acres of safflower grown in Western Canada is grown in Alberta. Saskatchewan increased acres in 1987 by 38% to 10,000 acres. However, production was low due to disease and poor stands.

Price Forecast for 1988/89

Crop	Price
Pea (feed quality)	$3.75 - $4.50/bu
Pea (human quality)	$4.00 - $5.00/bu
Lentil (Eston)	10 cents - 11 cents/lb
Lentil (Dark Speckled)	12 cents - 13 cents/lb
Lentil (Laird)	11.5 cents - 12 cents/lb
Lentil (Regular Chilean)	12 cents - 13 cents/lb
Fababean	5 cents - 7.5 cents/lb
Mustard (Brown and Oriental)	9 1/2 cents/lb
Mustard (Yellow)	11 1/2 cents/lb
Canaryseed	8 cents - 8 1/2 cents/lb
Safflower	12 cents - 13 cents/lb

Top Management Program

The Top Management Program uses a computer forward planning model that generates a cost of production report as well as projected financial statements for the next five years. The computer program has been developed by Dr. Schoney at the University of Saskatchewan for Saskatchewan farmers. This computer model allows a farm manager to enter information on his farm business, develop different scenarios for the future and test the strength of the farm business. The computer program will provide specific information on:

(1) What is the best combination of crops? For each product produced on your farm, this computer program will provide a detailed breakdown of the costs and returns. This information will allow the farm manager to determine what combination of products is best for his farm and where cost can be reduced for each product.

(2) Is machinery investment adequate, too high or too low? This computer program will provide cost on a per acre or per hour basis for each machine on your farm. It will provide an estimate of the number of hours a machine is used per year. This information will be valuable in deciding which equipment needs to be upgraded or downgraded.

(3) Given the present economic condition and expectations for the future, will the farm business continue to grow? Lower grain prices have substantially reduced farm incomes. Planning ahead for the next few years will make it easier to deal with the uncertainty that exists in the world markets for the products that are produced in Saskatchewan.

Through a series of three meetings, the University of Saskatchewan and Saskatchewan Agriculture staff provide a detailed outline of how the program operates, explains and assists in gathering the information on each individual farm and assists in analyzing the results and looking at alternatives. Written financial reports as well as floppy diskettes with all the farm information on it are provided to each farmer. This information can be updated annually. In addition, your Regional Farm Management Specialist will be able to update the information and analyze new opportunities for the farm business as they occur.

Individuals who are interested in participating in the Top Management Program should contact their Regional Farm Management Specialist or Dr. Schoney at the University of Saskatchewan, Saskatoon, 966-4018 or Don Barber of the Economics Branch, Saskatchewan Agriculture, Room 329 - 3085 Albert Street, Regina S4S 0B1, phone 787-5962.